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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Valene Skerpac

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7590

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EXAMINER

DAVIS, ZACHARY A

ART UNIT

PAPER NUMBER

2137

DATE MAILED: 06/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/062,799	Applicant(s) SKERPAC, VALENE	
	Examiner Zachary A. Davis	Art Unit 2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 February 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. A response with non-compliant amendments to the drawings was received on 27 January 2006. A response including corrected drawings was received on 27 February 2006. By the response received 27 January 2006, Claims 1 and 2 have been amended. New Claims 3-6 have been added. No claims have been canceled. Claims 1-6 are currently pending in the present application.

Response to Amendment

2. The amendments filed 27 January 2006 and 27 February 2006 are objected to under 35 U.S.C. 132(a) because they introduce new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

In the specification, in the paragraphs to be inserted on page 17 of the specification, noted at pages 5-6 of the present response, disclosure has been added of a signal being processed by "automatic speech recognition (ASR)" for "ASR matching". There was neither mention nor support of ASR or automatic speech recognition in the disclosure as originally filed. The Examiner notes that Claim 1 has also been amended to include recitation of automatic speech recognition, and that new Figure 1 also includes a reference to ASR.

Further, disclosure has been added in reference to "voice features" and a user's "voice print". Although there is general disclosure of voice recognition, there is no explicit mention of voice features or a voice print in the disclosure as originally filed. Additionally, disclosure has been added to the effect of "If the two validation signals" from speaker recognition and speech recognition "match each other" then the user is authenticated to the system. However, there was no support for such a feature in the disclosure as originally filed.

Applicant is required to cancel the new matter in the reply to this Office Action.

Response to Arguments

3. Applicant's arguments filed 27 January 2006 have been fully considered but they are not persuasive.

Claims 1 and 2 were rejected under 35 U.S.C. 102(e) as anticipated by Talmor et al, US Patent 6510415. New Claims 3-6 are directed to similar systems and methods.

With respect to Claim 1 and 2, Applicant argues that Talmor does not generate one-time challenge phrases. The Examiner respectfully disagrees, noting that at least the cited portions of Talmor explicitly state that a user is prompted with random words or phrases (i.e. one time challenge phrases) to repeat (see Talmor, column 8, line 63- column 9, line 2, as explicitly noted in the previous Office action). Applicant alleges that Talmor is void of a first database for generating one-time challenge phrases and a controller communicating with the first database for delivering a randomly generated

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challenge phrase for the user to speak, however, again, the Examiner notes that Talmor explicitly discloses that the system "prompts the user to say random phrases or terms" (again at column 8, line 63-column 9, line 2).

Regarding new Claims 3-6, Applicant asserts that none of the references of record describes or teaches authentication requiring the matching of both a spoken response as matching the challenge phrase (i.e. speech recognition) and also matching the response with the user (i.e. speaker recognition). However, the Examiner believes that Talmor does, in fact, discloses both speaker recognition (see, for example, column 6, lines 57-67, where the users are identified by voice print) and speech recognition (see, for example, column 8, line 48-column 9, line 2, where the voice authentication algorithm can be text-dependent and a user is prompted to say random phrases). The Examiner further notes that other cited art, notably at least Maes et al, US Patent 6411933, clearly includes both speaker recognition and speech recognition (see, for example, Maes, Figure 1). Further regarding Claim 3, Applicant gives the example "if a match of the spoken response to the challenge phrase (e.g. 'this is the patent office'), an authentication signal is not produced". The Examiner fails to appreciate this argument.

Therefore, for the reasons detailed above, the Examiner maintains the rejections as set forth below.

Drawings

4. The objections to the drawings noted in the previous Office action are moot in view of the new drawings filed 27 February 2006.

5. The drawings are objected to because Figure 1 does not correspond to its description in the specification. Specifically, the decision block after steps 12 and 13 of the flow chart of Figure 1 determines if both the ASR matching and the verification matching indicated a match. However, the specification as amended by the present response (see page 6 of the present response) indicates that the determination is made whether the validation signal from the ASR matching and the validation signal from the verification matching match each other. Therefore, the description in the specification does not accurately describe what is shown in the figure.

6. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an

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application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

7. The objection to the disclosure for informalities is NOT withdrawn. Applicant has not addressed all of the errors noted in the previous Office action, as noted below.

8. The disclosure is objected to because of the following informalities: The specification appears to contain minor typographical and other errors. For example, the sentence on page 14, lines 11-13, beginning "For example, a Personal Computer", appears to be a fragment.

Appropriate correction is required. The Examiner again notes that the above is not intended as an exhaustive list of errors. Applicant's cooperation is requested in correcting any other errors of which Applicant may become aware in the specification.

Claim Objections

9. Claims 1 and 3-5 are objected to because of the following informalities:

Claims 1 and 3-5 each recite the limitation "information from a user representative of the user" in line 2 of each claim. This is somewhat unclear, as it

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appears that the user is representative of the user, and should be changed to recite receiving "information representative of a user from the user".

Further in reference to Claim 1, in line 15, one repetition of "the" should be deleted in the phrase "to validate the the voice information". Additionally, commas should be inserted at the end of the two limitations that begin "to process..." (see lines 14-16 and 17-18). Further, the "and" at the end of the limitation in line 16 should be moved to the end of the limitation in line 18.

Claims 3 and 4 further recite the limitation "compare a spoken response to said challenge phrase to said challenge phrase" (in line 12 of Claim 3 and line 13 of Claim 4). The repetition of the phrase "to said challenge phrase" is somewhat unclear as it is not clear with what the spoken response is intended to be compared. The limitation should be changed to read "compare a spoken response to said challenge phrase with said challenge phrase" to make clear that the spoken response is a response to the challenge phrase, but that the spoken response is also being compared with the challenge phrase.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

10. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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11. Claims 1 and 3-6 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Specifically, Claim 1 recites issuing a first validation signal “in response to matching” after performing ASR matching and issuing a second validation signal “in response to matching” after verifying voice information used for speech recognition, and validating the spoken response in response to receiving the first and second validation signals. Similarly, Claims 3-5 recite issuing an authentication signal in response to a verification of the spoken response as matching the challenge phrase and a validation of the spoken response as representative of a user. However, there does not appear to be written description for these limitations in the specification; instead, the specification as amended provides for accepting or authenticating a user if the two validation signals (from speaker recognition and speech recognition) match **each other** (see page 6 of the present response) instead of whether the validation responses each indicate matches, as claimed.

Claim 6 is rejected due to its dependence on a rejected base claim.

12. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

13. Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitations "said first data base for delivering a randomly generated challenge phrase" in lines 9-10 of the claim, "the voice information used for speaker recognition" in line 15, "the voice information used for speech recognition" in lines 17-18, and "said selected challenge phrase" in line 19. There is insufficient antecedent basis for these limitations in the claim. Further, the claim recites issuing "a first validation signal in response to matching" in lines 15-16 and issuing "a second validation signal in response to matching" in line 18. It is not clear how the phrase "in response to matching" further limits the claim, because it is not clear what is matched with what.

Claim 2 recites the limitation "the spoken response" in line 10 of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim 3 recites the limitation "in response to said first signal to said station" in line 10 of the claim. It is not clear what is meant by this phrase, although it appears that that "to said station" is intended to modify forwarding one of the phrases in lines 9-10. Further, it is unclear what the subject of the limitation beginning "and for validating said spoken response", starting at line 14 of the claim, is. Additionally, in the limitation "said spoken response matching said challenge phrase and a validation" at lines 17-19, it is unclear how the spoken response can match both the challenge phrase and the validation.

Claim 4 recites the limitation “the stored biometric model” in lines 7-8 of the claim and elsewhere. However, as there is a model of each of a multiplicity of users as noted in lines 5-6, it is not clear to which biometric model of the multiplicity this is intended to refer. Similarly, the claim recites “the user” at line 9 and elsewhere. Because there is a multiplicity of users in lines 5-6, and also a user in line 2, it is not clear to which user this is intended to refer. Also, Claim 4 recites the limitation “in response to said first signal to said station” in line 11. It is not clear what is meant by this phrase, although it appears that that “to said station” is intended to modify forwarding one of the phrases in lines 10-11. Further, it is unclear what the subject of the limitation beginning “and for validating said spoken response”, starting at line 15 of the claim, is. Additionally, in the limitation “said spoken response matching said challenge phrase and a validation” at lines 18-20, it is unclear how the spoken response can match both the challenge phrase and the validation.

Claim 5 recites the limitation “a match between said first signal and said stored biometric models” in lines 7-8 of the claim. Although there is a model stored for each of a multiplicity of users, it is not clear how a signal can match all of the stored models; it appears that the signal would match at most one of the stored models. Claim 5 also recites the limitation “in response to said first signal to said station” in lines 9-10. It is not clear what is meant by this phrase, although it appears that that “to said station” is intended to modify forwarding one of the phrases in line 9. Further, in the phrase “the stored biometric models for validating said spoken response”, it is not clear how the models actually validate the response. Additionally, the claim recites the limitations

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“said stored biometric model of said one user” in lines 15-16 and “said one user” in line 19 of the claim. There is insufficient antecedent basis for these limitations in the claim. Finally, in the limitation “said spoken response matching said challenge phrase and a validation” at lines 17-19, it is unclear how the spoken response can match both the challenge phrase and the validation.

Claim 6 recites the limitation “the user” in line 1. However, because Claim 5 recites a user in line 2 and a further multiplicity of users in line 5, it is not clear to which user this is intended to refer.

Claim Rejections - 35 USC § 102

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

15. Claims 1-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Talmor et al, US Patent 6510415.

In reference to Claim 1, Talmor discloses a biometric security system including a station for receiving input information, which is representative of a user, from the user and generating a signal responsive thereto; a database having a plurality of words and

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language rules for generating one-time challenge phrases; a database having biometric models of users; and a controller that receives and validates the signal as representative of the user, where the controller communicates with the database that generates one-time challenge phrases for the user to speak, and communicates with the station to receive a spoken response and generate a second signal that represents the response, to validate voice information by speaker recognition and verify voice information by speech recognition, and to validate the spoken response to the challenge as representative of the user if the validation by speaker recognition and verification by speech recognition succeed (see Figure 1 and column 6, line 50-column 7, line 3 and column 7, line 25-column 8, line 38; see also column 8, line 43-column 9, line 7, noting especially at column 8, line 63-column 9, line 2, where the user is prompted to say random phrases).

Claim 2 is directed to a method corresponding substantially to the system of Claim 1, and is rejected by a similar rationale.

In reference to Claims 3 and 4, Talmor discloses a biometric security system including a station for receiving input information, which is representative of a user, from the user and generating a first signal responsive thereto; a database having a plurality of stored word phrases; a database storing biometric models of users; and a controller receiving and comparing the first signal to a stored biometric model, validating the first signal if the first signal matches a stored model, where the controller further randomly selects and forwards a word phrase as a challenge for a user to speak, receives and

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compares with the challenge a spoken response to the challenge, and verifies the response as matching the challenge, and where the controller additionally validates the response if the response matches the stored model, and the controller issues an authentication signal if both the response matches the phrase and the response is representative of a user (see Figure 1 and column 6, line 50-column 7, line 3 and column 7, line 25-column 8, line 38; see also column 8, line 43-column 9, line 7, noting especially at column 8, line 63-column 9, line 2, where the user is prompted to say random phrases).

Further in reference to Claim 4, Talmor further discloses that there are a multiplicity of users with stored biometric models (column 6, lines 57-67).

Claims 5 and 6 are directed to methods corresponding substantially to the system of Claim 4, and are rejected by a similar rationale.

Conclusion

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zachary A. Davis whose telephone number is (571) 272-3870. The examiner can normally be reached on weekdays 8:30-6:00, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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